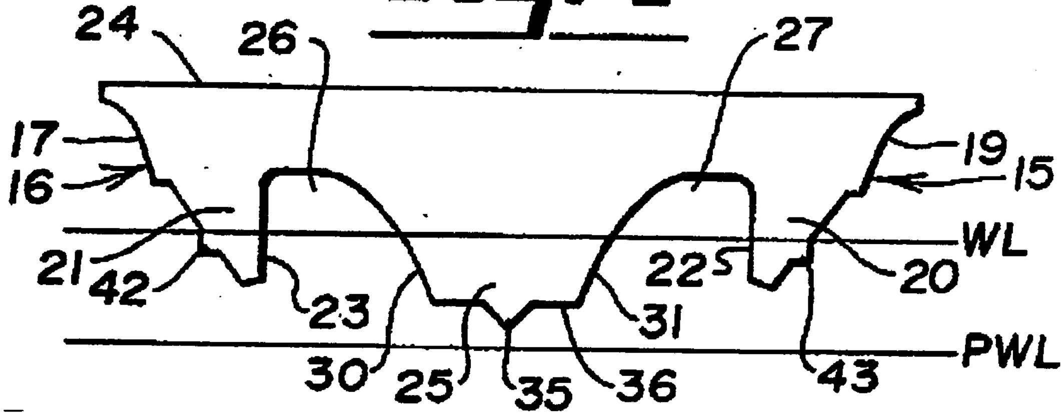
SEA ISLAND MARINE ENGINEERING, INC.
Naval Architecture & Marine Engineering

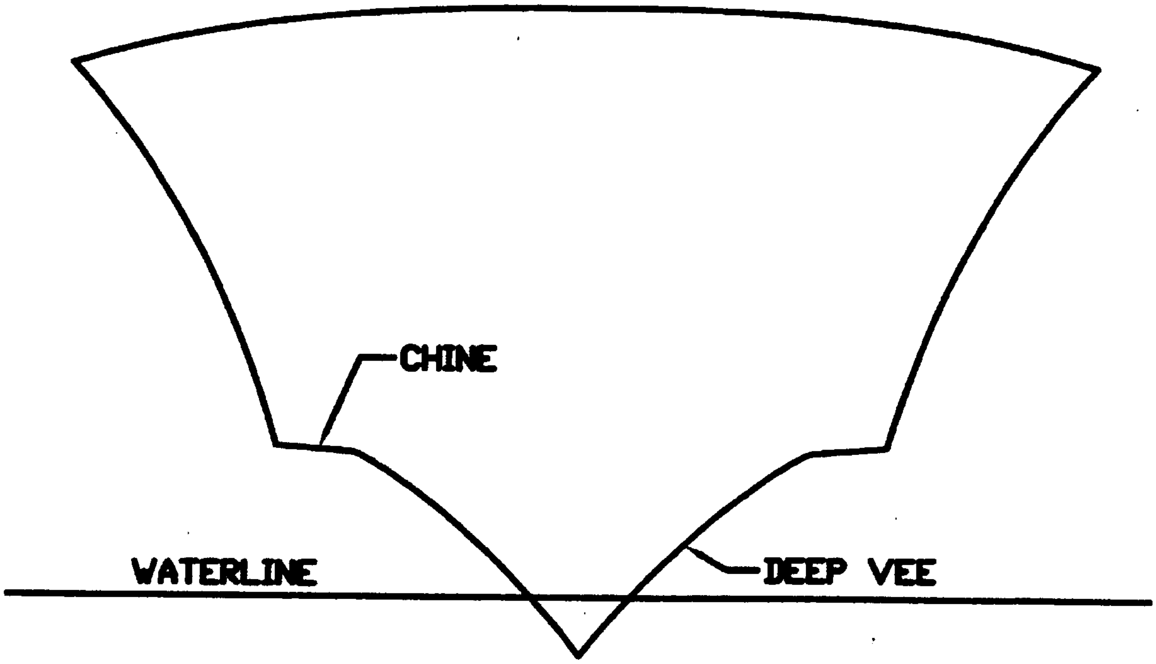
24 Escamacu Circle
St. Helena Island, SC 29920

Phone (843) 441-2000
roger@sime.us

Fig. 4



Fehn Hull Bow Section US 4,091,761



Guerard Hull Bow Section

Note that the Fehn bow shows three distinct hull sections in the water which makes it a trimaran. By contrast the Guerard hull has only one hull with a single pronounced V shape in contact with the water, commonly know as a deep vee section. It is also clear that the chines are not developed in the Guerard hull but are instead an integral part of one central hull. The deep vee section connects directly to the chine on the Guerard hull.

BEST AVAILABLE COPY

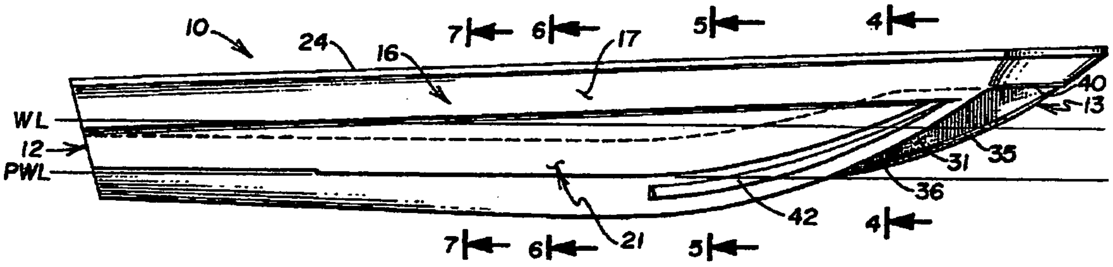
Patent Examiners Claim Rejections Continued:

> *Claims 1-11 and 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Fehn (US 4,091,761)*
>
> *Said outboard chines originate above a waterline of said hull, as shown in figure 1, and ultimately extend below said waterline as said chines extend aft, as shown in Figures 5-9, where said chines become significantly wider as they extend aft.*

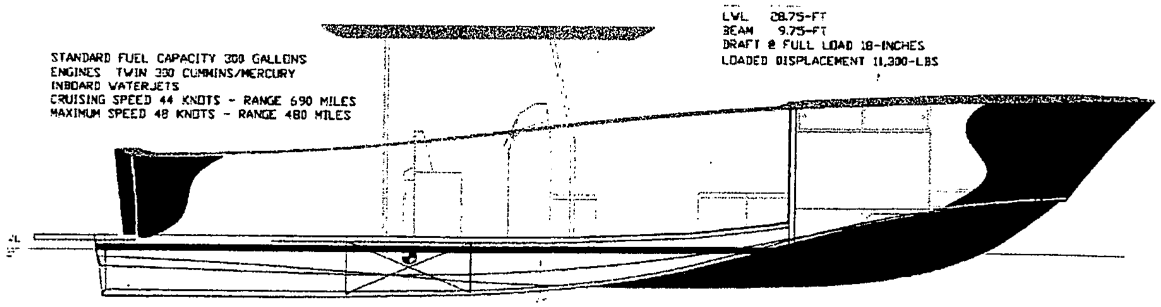
Response:

The sponsons of the Fehn hull are fully developed separate entities from the center hull and could never be considered a chine. It is interesting to see that Mr. Fehn referenced publications with "*Tri-Tunnel Hull Design*" so he was very much aware that his hull design was a trimaran. As shown in the Guerard Hull Bow Section the outboard chines are integral with the deep vee hull. Reviewing the hull profile Figure 1 from the Fehn patent and comparing it with the present invention by Guerard we can see distinct differences between the two hulls.

Fig. 1



Fehn Hull Profile US 4,091,761


STANDARD FUEL CAPACITY 300 GALLONS
ENGINES TWIN 330 CUMMINS/MERCURY
INBOARD WATERJETS
CRUISING SPEED 44 KNOTS - RANGE 690 MILES
MAXIMUM SPEED 48 KNOTS - RANGE 480 MILES
LWL 28.75-FT
BEAM 9.75-FT
DRAFT @ FULL LOAD 18-INCHES
LOADED DISPLACEMENT 11,300-LBS

Guerard Hull Profile Section

The present invention utilizes the centerline deep vee for buoyancy and interior accommodation forward. The Fehn boat does not have a deep vee section and utilizes the outboard sponsons for buoyancy over its entire length. The chines of the present invention could be considered similar

U. S. Patent May 30, 1978 Sheet 2 of 2 4,091,761

Fig. 2

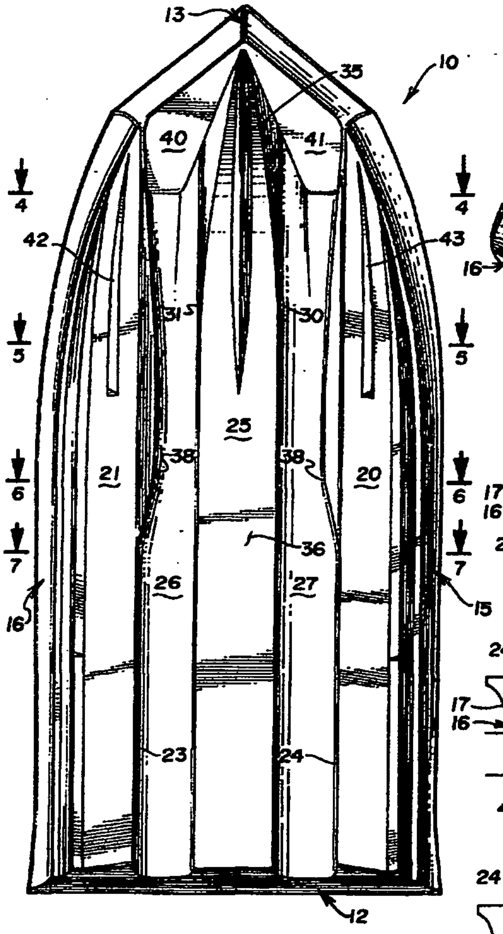


Fig. 3

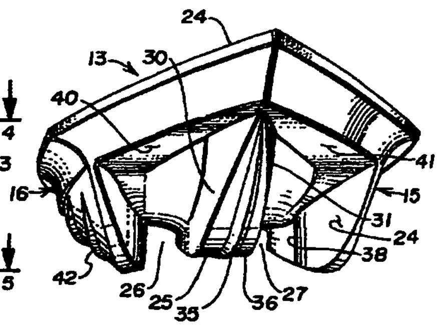


Fig. 4

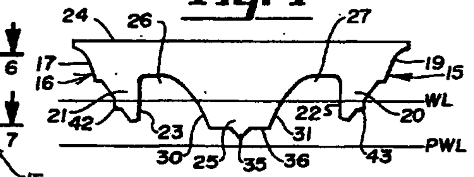


Fig. 5

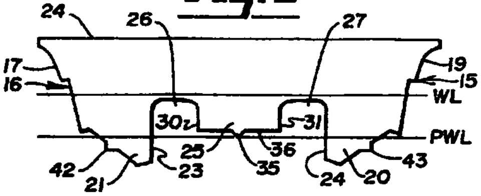


Fig. 8

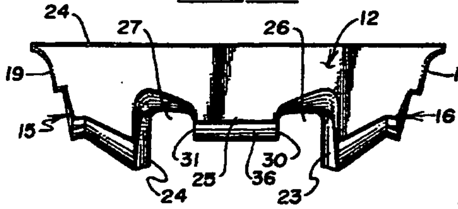


Fig. 6

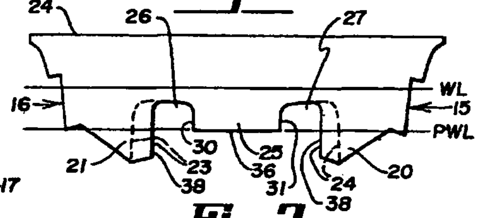
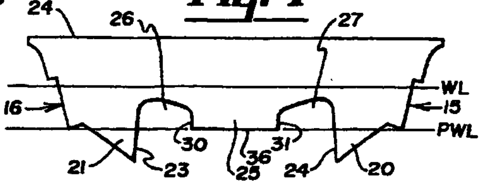


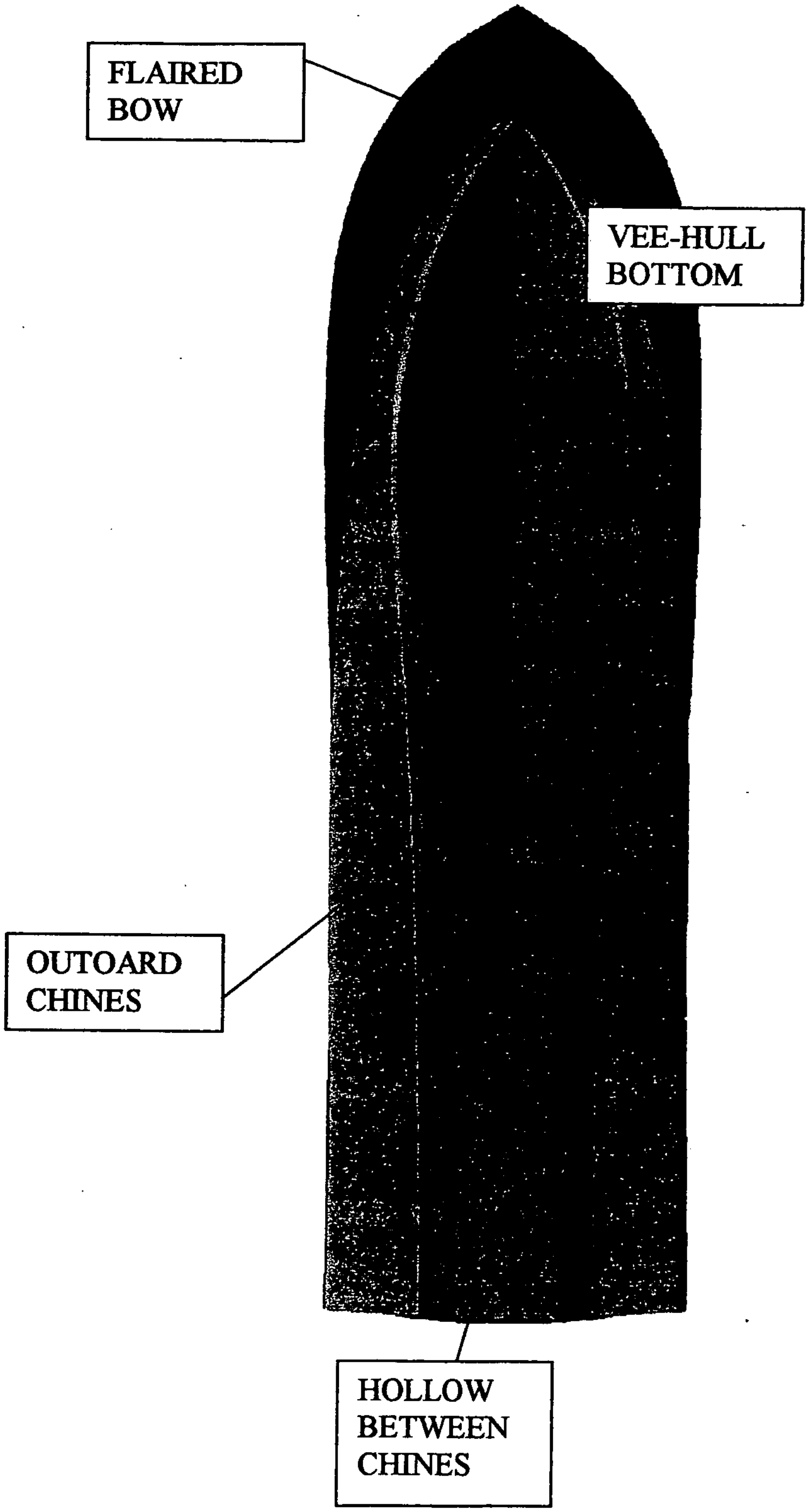
Fig. 7



Fehn Hull Bottom

BEST AVAILABLE COPY

SEA ISLAND MARINE ENGINEERING, INC.
24 Escamacu Circle
St. Helena Island, SC 29920
Naval Architecture & Marine Engineering
Phone (843) 441-2000
roger@sime.us



Guerard Hull Bottom

In reviewing the hull bottom of the present invention it is clear that only one venture is created by the outboard chines. Also note how the chines get wider as they transition aft while the centerline vee hull is hollow in the after sections of the boat.